River Bend 1
2Q/2003 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance: G Jun 10, 2003
Identified By: Self Disclosing
Item Type: FIN Finding
Foreign material caused failure of one residual heat removal equipment room floor drain sump pump while the other pump was unavailable
The inspectors identified a self-revealing finding for failure to control foreign material in the residual heat removal Train B equipment room which resulted in the failure of one of two floor drain pumps while the other floor drain pump was unavailable. The finding was of very low safety significance because the floor drain sump pump failure did not cause an actual loss of safety function for residual heat removal Train B. The inspectors determined that the licensee's failure to control foreign material in the residual heat removal Train B equipment room, which resulted in the fouling and unavailability of floor drain Pump DFR-P3L while Pump DFR-P3E was also unavailable, was a performance deficiency. This self-revealing finding was more than minor because, if left uncorrected and a leak developed in the residual heat removal Train B equipment room, the unavailability of both floor drain sump pumps could lead to a loss of residual heat removal Train B. The inspectors reviewed the finding using Inspection Manual Chapter 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations." Based on the results of the phase one screening of the finding, the inspectors determined that the finding was of very low safety significance because the floor drain sump pump failure did not increase the likelihood of a plant trip or degrade more than one train of any safety system. The finding is documented in the licensee's corrective action program as CR-RBS-2003-2368.
Inspection Report# : 2003004*(pdf)*

Significance: G Feb 21, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to maintain watertight integrity of severe weather doors compromised the availability of standby service water system
The inspectors identified a noncited violation for the failure of the licensee to comply with 10 CFR Part 50, Appendix B, Criterion III, "Design Control." This violation was for failure to incorporate necessary measures into station procedures to ensure that the design basis of the doors at the end of underground G-Tunnel was maintained. The finding was more than minor because it was associated with flood protection measures and degraded the ability to meet the mitigating systems cornerstone objective. It had an adverse impact on the flooding potential of the G-Tunnel, which opened into the base of the standby cooling tower, and challenged the availability of the standby service water system. The finding is of very low safety significance because of the existing condition of the door seals, the availability of two nonsafety-related sump pumps at the base of the standby cooling tower, the relative height of the control circuits and motor operators of the cooling tower inlet valves and the possibility of operator action to manually initiate standby

service water before the failure of the standby cooling tower inlet valves. The finding was documented in the licensee's corrective action program as CR-RBS-2003-1894.
Inspection Report# : 2003004*(pdf)*

Significance: G Dec 28, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to take proper corrective actions for low pressure core spray pump minimum flow valve failure resulted in the failure of the residual heat removal pump minimum flow valve
The inspectors identified a noncited violation of 10 CFR 50 Appendix B Criterion XVI for failure to take proper corrective action following a failure of the low pressure core spray pump minimum flow valve that resulted in an identical failure of the residual heat removal Pump A minimum flow valve nine months later. The inspector identified non-cited violation was greater than minor because it was associated with the mitigating systems cornerstone objective to ensure the availability, reliability and capability of systems (residual heat removal Train A) that respond to initiating events to prevent undesirable consequences. With the minimum flow valve open, residual heat removal Train A was not able to meet its design flow rate for either the low pressure coolant injection or suppression pool cooling mode of system operation. The inspectors evaluated the finding using IMC 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Reactors" and determined that the residual heat removal Pump A minimum flow valve failure was of very low safety significance because the other low pressure coolant injection systems were available and the other train of suppression pool cooling was available at the time.
Inspection Report# : 2003003*(pdf)*

Significance: TBD Sep 18, 2002
Identified By: Self Disclosing
Item Type: AV Apparent Violation
Failure to properly lock open condensate valve resulted in loss of feedwater flow following reactor scram.
(TBD) The inspectors identified an apparent violation of Technical Specification 5.4.1.a, which required that written procedures be established, implemented, and maintained covering the applicable procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A. Regulatory Guide 1.33 lists the condensate system as one of the systems requiring operating procedures. System Operating Procedure SOP-0007, "Condensate System," Revision 21, required that Condensate Prefilter Vessel Bypass Flow Control Valve CNM-FCV200 be locked open. On September 18, 2002, Valve VNM-FVC200 was found to be improperly locked in the open position. This failure to properly lock open CNM-FCV200 resulted in unexpected closure of the valve and a loss of feedwater flow to the reactor vessel following a reactor scram. The final significance of this issue will be determined using the Significance Determination Process.
Inspection Report# : 2002007*(pdf)*

Significance: G Aug 15, 2002
Identified By: NRC
Item Type: FIN Finding
Ineffective corrective actions caused station blackout diesel generator to be unavailable
On August 15, 2002, the licensee performed a routine monthly performance test of the station blackout diesel generator. Four minutes into the one-hour run the diesel generator tripped on high coolant temperature. Similar failures of the station blackout diesel generator to run due to high temperature trips had occurred in each of the two previous monthly performance tests on June 21 and July 19, 2002. For each of these failures, the licensee identified an apparent cause for the failure and corrected the problems identified. Following the failure on August 15, 2002, the inspectors determined that the licensee-identified causes for the previous station blackout diesel generator failures were not accurate; therefore, the corrective actions taken were ineffective. The inspectors evaluated the ineffective corrective

actions taken to correct two failures of the station blackout diesel generator using inspection Manual Chapter 0609, "Significance Determination Process," Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations." The inspectors determined that the finding was more than minor in that it affected the operability and availability of a risk-significant mitigating system, i.e., the station blackout diesel generator. The inspectors determined that the failure to maintain the station blackout diesel generator operable was of very low safety significance (Green) because of the low likelihood of a station blackout event occurring, the probability that operators could restore the diesel following an initial failure, and the availability of all other standby electrical systems. This problem identification and resolution issue was entered into the licensee's corrective action program as CR-RBS-2002-0664.
Inspection Report# : 2002003*(pdf)*

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Significance: G Apr 09, 2003
Identified By: NRC
Item Type: FIN Finding
Failure to maintain collective doses ALARA that were associated with RWP 2003-1929
A finding was identified because the licensee failed to maintain collective doses ALARA. Specifically, the work activity collective dose associated with RWP 2003-1929 Task 1, "Refueling Outage 11 Recirculation Pump Work," exceeded 5 person-rem and exceeded the dose estimation by more than 50 percent. The failure to maintain collective doses ALARA is a performance deficiency. This finding was more than minor because it is associated with the Occupational Radiation Safety Cornerstone attribute (ALARA planning/projected dose) and affected the associated cornerstone objective (to ensure adequate protection of worker health and safety from exposure to radiation). This occurrence involved worker inefficiencies, inadequate planning, scheduling and supervisory oversight which resulted in unplanned, unintended occupational collective dose for a work activity. When processed through the Occupational Radiation Safety Significance Determination Process, this finding was found to have no more than very low safety significance because the finding was an ALARA Planning issue, the licensee's three-year rolling average collective dose was greater than 240 person-rem, the actual dose for the work activity was not more than 25 person-rem, and there were no more than four occurrences.
Inspection Report# : 2003003*(pdf)*

Significance: G Apr 09, 2003
Identified By: NRC
Item Type: FIN Finding
Failure to maintain collective doses ALARA that were associated with RWP 2003-1935
A finding was identified because the licensee failed to maintain collective doses ALARA. Specifically, the work

activity collective dose associated with RWP 2003-1935, "Drywell Valve Maintenance, to include Repacks and Support Work," exceeded 5 person-rem and exceeded the dose estimation by more than 50 percent. The failure to maintain collective doses ALARA is a performance deficiency. This finding was more than minor because it is associated with the Occupational Radiation Safety Cornerstone attribute (ALARA planning/projected dose) and affected the associated cornerstone objective (to ensure adequate protection of worker health and safety from exposure to radiation). This occurrence involved worker inefficiencies and inadequate planning which resulted in unplanned, unintended occupational collective dose for a work activity. When processed through the Occupational Radiation Safety Significance Determination Process, this finding was found to have no more than very low safety significance because the finding was an ALARA Planning issue, the licensee's three-year rolling average collective dose was greater than 240 person-rem, the actual dose for the work activity was not more than 25 person-rem, and there were no more than four occurrences.
Inspection Report# : 2003003*(pdf)*

Significance:  Apr 09, 2003
Identified By: Self Disclosing
Item Type: NCV NonCited Violation
Failure to develop a sufficiently detailed work plan
The licensee failed to develop a sufficiently detailed work plan for the decontamination of the reactor vessel bellows, in violation of Technical Specification 5.4.1. a. The work plan failed to provide guidance on maintaining highly contaminated surfaces (the reactor vessel bellows surface) wet, using a hydrolaser with a rotary surface cleaner, or briefing the individual using the hydrolaser. The lack of a detailed work planned contributed to an unexpected increase in airborne radioactivity and unplanned personnel exposures. This self-revealing, noncited violation was greater than minor because it was associated with one of the Occupational Radiation Safety Cornerstone attributes (exposure/contamination control) and the finding affected the associated cornerstone objective (to ensure the adequate protection of the worker health and safety from exposure to radiation from radioactive material). The inspector processed the violation through the Occupational Radiation Protection Significance Determination Process because the occurrence involved potential doses (resulting from actions or conditions contrary to licensee procedures) which could have been significantly greater as a result of a single minor, reasonable alteration of the circumstances. However, because the violation was not an as low as is reasonably achievable (ALARA) finding, there was no personnel overexposure, there was no substantial potential for personnel overexposure, and the finding did not compromise the licensee's ability to assess dose, the violation had no more than very low safety significance.
Inspection Report# : 2003003*(pdf)*

Significance:  Apr 09, 2003
Identified By: Self Disclosing
Item Type: NCV NonCited Violation
Failure to survey
The licensee failed, in three examples, to survey or evaluate radiological hazards when conducting reactor vessel bellows decontamination, in violation of 10 CFR 20.1501(a). First, the licensee failed to evaluate the highest concentration of radioactive contamination on the reactor vessel bellows. Additionally, the licensee failed to evaluate the airborne radioactivity in the immediate vicinity of reactor vessel bellows contamination. Later, the licensee failed to evaluate the airborne radioactivity levels throughout the containment building when continuous air monitors alarmed. This self-revealing, noncited violation was greater than minor because it was associated with one of the Occupational Radiation Safety Cornerstone attributes (exposure/contamination control) and the finding affected the associated cornerstone objective (to ensure the adequate protection of the worker health and safety from exposure to radiation from radioactive material). The inspector processed the violation through the Occupational Radiation Protection Significance Determination Process because the occurrence involved potential doses (resulting from actions or conditions contrary to licensee procedures) which could have been significantly greater as a result of a single minor,

reasonable alteration of the circumstances. However, because the violation was not an ALARA finding, there was no personnel overexposure, there was no substantial potential for personnel overexposure, and the finding did not compromise the licensee's ability to assess dose, the violation had no more than very low safety significance.
Inspection Report# : 2003003*(pdf)*

Significance: G Apr 09, 2003
Identified By: Self Disclosing
Item Type: NCV NonCited Violation
Failure to post an airborne radioactivity area
The licensee failed to post the reactor containment building as an airborne radioactivity area, in violation with 10 CFR 20.1902(d). Airborne radioactivity levels exceeded the allowable limits in 10 CFR Part 20, Appendix B by as much as 3.5 times. The condition existed for at least five hours. This self-revealing, noncited violation was greater than minor because it was associated with one of the Occupational Radiation Safety Cornerstone attributes (exposure/contamination control) and the finding affected the associated cornerstone objective (to ensure the adequate protection of the worker health and safety from exposure to radiation from radioactive material). The inspector processed the violation through the Occupational Radiation Protection Significance Determination Process because the occurrence involved potential doses (resulting from actions or conditions contrary to licensee procedures) which could have been significantly greater as a result of a single minor, reasonable alteration of the circumstances. However, because the violation was not an ALARA finding, there was no personnel overexposure, there was no substantial potential for personnel overexposure, and the finding did not compromise the licensee's ability to assess dose, the violation had no more than very low safety significance.
Inspection Report# : 2003003*(pdf)*

Significance: G Apr 09, 2003
Identified By: Self Disclosing
Item Type: NCV NonCited Violation
Failure to instruct workers
Following an occurrence that caused an airborne radioactivity area, the licensee failed to inform workers of radiological conditions that had changed and of precautions to minimize exposure, in violation of 10 CFR 19.12. This self-revealing, noncited violation was greater than minor because it was associated with one of the Occupational Radiation Safety Cornerstone attributes (exposure/contamination control) and the finding affected the associated cornerstone objective (to ensure the adequate protection of the worker health and safety from exposure to radiation from radioactive material). The inspector processed the violation through the Occupational Radiation Protection Significance Determination Process because the occurrence involved potential doses (resulting from actions or conditions contrary to licensee procedures) which could have been significantly greater as a result of a single minor, reasonable alteration of the circumstances. However, because the violation was not an ALARA finding, there was no personnel overexposure, there was no substantial potential for personnel overexposure, and the finding did not compromise the licensee's ability to assess dose, the violation had no more than very low safety significance.
Inspection Report# : 2003003*(pdf)*

Significance: G Apr 09, 2003
Identified By: Self Disclosing
Item Type: NCV NonCited Violation
Failure to control a locked high radiation area
The licensee failed to control an area with dose rates of 1000 millirems per hour as a locked high radiation area, in violation of Technical Specification 5.7.2. After a plant scram on September 18, 2002, a worker entered the reactor core isolation cooling area on the 95-foot elevation of the auxiliary building and received an electronic dosimeter dose

rate alarm. A crud burst resulting from a transient that occurred approximately three hours previously caused the dose levels in the area entered by the worker to increase to 1000 millirems per hour. Historically, the site has experienced crud bursts under similar conditions and the increase in dose rate should have been anticipated and evaluated. This self-revealing, noncited violation was greater than minor because it was associated with one of the Occupational Radiation Safety Cornerstone attributes (exposure/contamination control) and the finding affected the associated cornerstone objective (to ensure the adequate protection of the worker health and safety from exposure to radiation from radioactive material). The inspector processed the violation through the Occupational Radiation Protection Significance Determination Process because the occurrence involved potential doses (resulting from actions or conditions contrary to licensee procedures) which could have been significantly greater as a result of a single minor, reasonable alteration of the circumstances. However, because the violation was not an ALARA finding, there was no personnel overexposure, there was no substantial potential for personnel overexposure, and the finding did not compromise the licensee's ability to assess dose, the violation had no more than very low safety significance.
Inspection Report# : 2003003*(pdf)*

Public Radiation Safety

Physical Protection

Miscellaneous

Last modified : September 04, 2003